# **Rodrigo S Targino**

#### **Curriculum Vitae**

January 2021

- School of Applied Mathematics (EMAp), Getulio Vargas Foundation (FGV), Rio de Janeiro, RJ, Brazil.
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## **Education**

2017	PhD in Statistics	University College London (UCL)	London, UK
2010	MSc in Statistics	Federal University of Rio de Janeiro (UFRJ)	Rio de Janeiro, Brazil
2008	BSc in Applied Mathematics	Federal University of Rio de Janeiro (UFRJ)	Rio de Janeiro, Brazil

## **Employment**

2017-	<b>Assistant Professor</b> , School of Applied Mathematics (EMAp),	
	Getulio Vargas Foundation (FGV)	Rio de Janeiro, Brazil
2011-2012	Market Risk Analyst, Credit Suisse Hedging Griffo	São Paulo, Brazil
2010-2011	Credit Risk Analyst, Itaú-Unibanco Bank	São Paulo, Brazil

# **Teaching experience**

2017-2018	Probability	BSc	FGV
2017-2018	Statistics	BSc	FGV
2017-2018, 2020	Statistics and Econometrics	MSc	IMPA
2018-2019	Statistics	MSc	FGV
2019	Machine Learning	BSc	FGV
2019-2020	Probability	MSc	FGV
2020	Machine Learning	MSc	FGV
2020	Statistics and Econometrics	BSc	FGV

## **Academic supervisions**

#### **PhD**

2019-	Marcus Gerardus	Lavagnole Nascimento	UFRI

#### MSc

2019-	Hugo Barreto	FGV
2019-	Christiano Lo Bianco Clementino	IMPA
2019-2020	Pedro Medeiros Teixeira	FGV
2019-2020	Marcelo Orgler	FGV
2018-2019	Lucas Paiva de Carvalho	IMPA
2018-2019	João Marcos Amorim dos Santos*	FGV
2018-2019	Yuri Resende Fonseca*	IMPA
2017-2018	Renan Lima Novais*	FGV

#### BSc

2019-2020	Matheus Borghi	FGV	
2017-2017	Paulo de Tarso Silva Santos*	FGV	
2016-2016	Helder Rezende*	FGV	
(*) Second supervisor			

## **Refereeing services**

#### lournale

Risks, Journal of Risk and Financial Management, Computation and Applied Mathematics, Brazilian Review of Econometrics, ASTIN Bulletin, Journal of Banking and Finance, Sustainability, Quantitative Finance, Revista Contabilidade & Finanças, Brazilian Review of Finance, International Journal of Forecasting, Applied Stochastic Models in Business and Industry, Computational Statistics

## **Funding agencies**

Natural Sciences and Engineering Research Council of Canada, Czech Science Foundation

## **Research visits**

2019 Samuel Livingstone UCL, UK

2019 Emmanuel Gobet École Polytechnique, France

2014 Pavel Shevchenko CSIRO, Australia
2014 Mario Wuthrich ETH, Switzerland
2013 Pavel Shevchenko CSIRO, Australia

## **Publications**

#### Refereed research papers

- 1. Merkle, M, YF Saporito, and RS Targino (2020). Bayesian approach for parameter estimation of continuous-time stochastic volatility models using Fourier transform methods. *Statistics & Probability Letters* **156**, 108600.
- 2. Nieto-Barajas, LE and RS Targino (2020). A gamma moving average process for modelling dependence across development years in run-off triangles. ASTIN Bulletin: The Journal of the IAA.
- 3. Peters, GW, RS Targino, and MV Wüthrich (2017). Bayesian modelling, Monte Carlo sampling and capital allocation of insurance risks. *Risks* **5**(4), 53.
- 4. Peters, GW, RS Targino, and MV Wüthrich (2017). Full bayesian analysis of claims reserving uncertainty. *Insurance: Mathematics and Economics* **73**, 41–53.
- 5. Targino, RS, GW Peters, G Sofronov, and PV Shevchenko (2017). Optimal exercise strategies for operational risk insurance via multiple stopping times. *Methodology and Computing in Applied Probability* **19**(2), 487–518.
- 6. Targino, RS, GW Peters, and PV Shevchenko (2015). Sequential Monte Carlo Samplers for capital allocation under copula-dependent risk models. *Insurance: Mathematics and Economics* **61**, 206–226.
- 7. Peters, GW, RS Targino, and PV Shevchenko (2013). Understanding operational risk capital approximations: first and second orders. *The Journal of Governance and Regulation* **2**(3).

## Working papers under revision or review

- 1. Saporito, YF and RS Targino (2020). "Avoiding zero probability events when computing Value at Risk contributions: a Malliavin calculus approach". https://arxiv.org/abs/2004.13235.
- Duarte, D, YF Saporito, and RS Targino (2018). "The Impact of the Freedom of the Press on Risk". https://dx.doi.org/ 10.2139/ssrn.3218754.

#### **Academic presentations**

- 1. The economic uncertainty index: the Brazilian case, its relations with the freedom of the press and new estimation methods (Oct. 2020). *School of Economics USP-RP*.
- 2. Round table on the job market for data scientistis (2020). 3ª Semana da Engenharia Matemática e Matemática Aplicada da UFRJ.
- 3. Avoiding zero probability events when computing Value at Risk allocations (July 2020). One World Actuarial Research Seminar (OWARS).
- 4. Understanding Economic Policy Uncertainty index using semi-automatic news classification (Mar. 2020). *Encontro Brasileiro de Estatística Bayesiana (EBEB)*, *Maresias*, *Brazil*.
- 5. Understanding Economic Policy Uncertainty index using semi-automatic news classification (2019). École Polytechnique, Paris, France.
- 6. Understanding Economic Policy Uncertainty index using semi-automatic news classification (2019). 4th International Workshop in Financial Econometrics\*, Maceió, Brazil.
- 7. Understanding Economic Policy Uncertainty index using semi-automatic news classification (2019). Escola de Séries Temporais e Econometria, Gramado, Brazil.
- 8. Understanding Economic Policy Uncertainty index using semi-automatic news classification (2019). Workshop on Stochastic Simulation Methods in Statistics, Rio de Janeiro, Brazil.
- 9. Understanding Economic Policy Uncertainty index using semi-automatic news classification (2019). *Universidade Federal de Santa Catarina (UFSC)*, *Florianópolis*, *Brazil*.
- 10. The Impact of the Freedom of the Press on Risk (2019). SIAM Conference on Financial Mathematics & Engineering, Toronto, Canada.
- 11. The Impact of the Freedom of the Press on Risk (2019). Universidade Federal do Rio de Janeiro (UFRJ), Rio de Janeiro, Brazil.
- 12. Bayesian Modelling, Monte Carlo Sampling and Capital Allocation of Insurance Risks (2019). *3rd International Congress on Actuarial Science and Quantitative Finance, Manizales, Colombia.*

- 13. Prediction of the Volatility Surface with Generalized Autoregressive Score (GAS) models (2018). Congresso Nacional de Matemática Aplicada e Computacional (CNMAC), Campinas, Brazil.
- 14. The Impact of the Freedom of the Press on Risk (2018). 33 Foro Nacional de Estadística (FNE) y 13 Congreso Latinoamericano de Sociedades de Estadística (CLATSE), Guadalajara, Mexico.
- 15. The Impact of the Freedom of the Press on Risk (2018). Workshop in Econometrics, São Paulo, Brazil.
- 16. Efficient Monte Carlo algorithms for risk allocation (2018). Research in Options (RiO), Rio de Janeiro, Brazil.
- 17. Bayesian Modelling, Monte Carlo Sampling and Capital Allocation of Insurance Risks (2018). Simpósio Nacional de Probabilidade e Estatística, São Pedro, Brazil.
- 18. Realistic Risk Parity Portfolios (2017). 3rd International Workshop in Financial Econometrics\*, Arraial d'Ajuda, Brazil.
- 19. Bayesian Modelling, Monte Carlo Sampling and Capital Allocation of Insurance Risks (2017). 31st Brazilian Mathematical Colloquium, Rio de Janeiro, Brazil.
- 20. Bayesian Modelling, Monte Carlo Sampling and Capital Allocation of Insurance Risks (2017). UCT Mid-Challenge Workshop in Financial Mathematics, Cape Town, South Africa.
- 21. Bayesian Modelling, Monte Carlo Sampling and Capital Allocation of Insurance Risks (2017). *Universidade Federal do Rio de Janeiro (UFRJ)*, *Rio de Janeiro*, *Brazil*.
- 22. Bayesian Modelling, Monte Carlo Sampling and Capital Allocation of Insurance Risks (2017). *Instituto Nacional de Matemática Pura e Aplicada, Rio de Janeiro, Brazil.*
- 23. Bayesian Modelling, Monte Carlo Sampling and Capital Allocation of Insurance Risks (2016). 3rd Workshop on Assessment of Risk (WAR)\*, São Paulo, Brazil.
- 24. Bayesian Modelling, Monte Carlo Sampling and Capital Allocation of Insurance Risks (2016). Research in Options (RiO), Rio de Janeiro, Brazil.
- 25. Bayesian Modelling, Monte Carlo Sampling and Capital Allocation of Insurance Risks (2016). Fundação Getulio Vargas, Rio de Janeiro, Brazil.
- 26. Bayesian Modelling, Monte Carlo Sampling and Capital Allocation of Insurance Risks (2016). Cass Business School, London, United Kingdom.
- 27. Sequential Monte Carlo Samplers for capital allocation under copula-dependent risk models (2015). *Christmas Workshop on Sequential Monte Carlo and related methods*, London, UK.
- 28. Sequential Monte Carlo Samplers for capital allocation under copula-dependent risk models (2015). Sequential Monte Carlo Workshop\*, Paris, France.
- 29. Sequential Monte Carlo Samplers for capital allocation under copula-dependent risk models (2015). Congress on Insurance: Mathematics and Economics, Liverpool, UK.
- 30. Sequential Monte Carlo Samplers for capital allocation under copula-dependent risk models (2015). *Universidade Federal do Rio de Janeiro (UFRJ)*, *Rio de Janeiro*, *Brazil*.
- 31. Sequential Monte Carlo Samplers for capital allocation under copula-dependent risk models (2014). *University of New South Wales (UNSW)*, *Sydney*, *Australia*.
- 32. Sequential Monte Carlo Samplers for capital allocation under copula-dependent risk models (2014). Research Students Conference, Nottingham, United Kingdom.
- 33. Sequential Monte Carlo Samplers for capital allocation under copula-dependent risk models (2014). *Monte Carlo and Quasi Monte Carlo (MCQMC)*, *Leuven*, *Belgium*.
- 34. Optimal exercise strategies for operational risk insurance via multiple optimal stopping times (2013). *Universidade Federal do Rio de Janeiro (UFRJ)*, *Rio de Janeiro*, *Brazil*.
- 35. (2013). CFE-ERCIM, London, United Kingdom.
- 36. (2013). Macquarie University, Sydney, Australia.
- 37. Hedging in incomplete markets using Fourier series method (2009). Research In Options\*, Búzios, Brazil.
- 38. Applications of the fractional Brownian motion in finance (2009). XIII Brazilian School of Probability\*, Maresias, Brazil.
- 39. Estimation of the parameters of the Heston model by Fourier series method (2009). 13a Escola de Séries Temporais e Econometria, São Carlos, Brazil.
- 40. Calibration of the Heston model by Fourier series method (2009). Fourth Brazilian Conference on Statistical Modelling in Insurance and Finance, Maresias, Brazil.
- 41. Bayesian selection for Heston models with volatilities determined by Fourier series method (2008). Research In Options (RiO)\*, Angra dos Reis, Brazil.
- (\*) Poster presentations.